SUPERFUND STATE CONTRACT

BETWEEN THE STATE OF KANSAS AND

THE U.S. ENVIRONMENTAL PROTECTION AGENCY

FOR REMEDIAL ACTION AT THE

CHEROKEE COUNTY SUPERFUND SITE

RAILROADS, OPERABLE UNIT #08

PHASE I

SITE ID: 0737

CONTRACT NO. 22-03-KS-0737-08

JULY 2022

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ARTICLE I. GENERAL AUTHORITIES

This Superfund State Contract ("Contract" or "SSC") is entered into pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601 et seq., as amended (herein referred to as "CERCLA"); the National Oil and Hazardous Substances Pollution Contingency Plan, 55 F.R. 8666 et seq. (40 CFR Part 300, March 8, 1990, hereinafter referred to as the "NCP"); other applicable Federal regulations including 40 CFR Part 35, Subpart O, and 2 CFR Parts 200 and 1500; and Kansas Statutes Annotated (K.S.A.) 65-3401 et seq., known as the Kansas Solid Waste Act, K.S.A. 65-161, et seq., K.S.A. 65-3453 and K.S.A. 65-3454a.

ARTICLE II. PURPOSE OF THE SSC

This SSC is an agreement between the United States Environmental Protection Agency (EPA) and the State of Kansas. The Governor has designated the Kansas Department of Health and the Environment to work in partnership with EPA on behalf of the State of Kansas ("the State") concerning remedial actions to be conducted at the Cherokee County Superfund site, Cherokee County, KSD980741862 ("the Site"). This SSC documents the responsibilities of EPA and the State and includes provisions that outline the basic purpose, scope, and administration of the SSC, as well as those activities described in the attached Performance Work Statement (PWS), Appendix I. For the purposes of this SSC, the term "remedial action" does not include operation and maintenance.

ARTICLE III. DURATION OF THE SSC

This Contract shall become effective upon execution by EPA and the State and shall remain in effect until terminated (See Termination provision) or the terms for final SSC conclusion of the Contract are met (See Conclusion of this SSC provision).

This Contract constitutes an initial SSC.

ARTICLE IV. NEGATION OF AGENCY RELATIONSHIP BETWEEN THE SIGNATORIES

Nothing contained in this Contract shall be construed to create, either expressly or by implication, the relationship of agency between the EPA and the State. The EPA (including its employees, agents, and contractors) is not authorized to represent or act on behalf of the State in any matter relating to the subject matter of this Contract and the State (including its employees, agents, and contractors) is not authorized to represent or act on behalf of the EPA in any matter relating to the subject matter of this Contract.

ARTICLE V. EMERGENCY RESPONSE ACTIVITIES

Any emergency response activities, emergency circumstances or removal actions conducted pursuant to the NCP shall not be restricted by the terms of this Contract. Remedial activities may be suspended until the emergency activities are concluded, in which case, the SSC may be subject to amendment.

ARTICLE VI. SITE DESCRIPTION

A description of the Site, including a discussion of the location of the Site, its physical characteristics (site geology and proximity to drinking water supplies), the nature of the release (contaminant type and affected media), past response actions, and the response actions that are still required, and their expected benefits, is included in the 2016 Record of Decision (ROD) for Operable Unit (OU) 08. A limited description is also available in the included PWS in Appendix I.

ARTICLE VII. SITE-SPECIFIC STATEMENT OF WORK

A site-specific Performance Work Statement (PWS) for all remedial (or other response) actions provided under this SSC, including estimated costs per task, and a standard task to ensure that a sign is posted at the Site providing the appropriate contacts for obtaining information on activities being conducted at the Site, and for reporting suspected criminal activities, is attached in Appendix I.

ARTICLE VIII. STATEMENT OF INTENTION TO FOLLOW EPA POLICY AND GUIDANCE

In addition to the requirements specified in CERCLA and the NCP, the EPA and the State intend to follow all policy and guidance pertinent to this remedy, including those identified in the Administrative Record and/or stated here.

ARTICLE IX. PROJECT SCHEDULE

A general description of the project schedule/milestones–either by calendar year or Federal Fiscal year–which includes a summary of deliverables, as specified in the PWS, is attached as Appendix I.

ARTICLE X. DESIGNATION OF PRIMARY CONTACTS AND THEIR RESPONSIBILITIES

1. EPA Designation

The EPA has designated the following person to serve as the Remedial Project Manager (RPM) and act on behalf of the EPA in the implementation of this Contract.

Todd Campbell
SEMD/LMSE/MSRS,
11201 Renner Boulevard, Lenexa, KS 66219

Campbell.Todd@epa.gov
(913) 551-7115

The designated RPM may be changed by written notification in a timely manner to the State signatories and incorporated by reference herein without amending this Contract.

2. State Designation

The State has designated the following person to serve as the State Project Manager (SPM) and act on behalf of the State in the implementation of this Contract.

Peyton Witham
1000 SW Jackson, Suite 410, Topeka, KS 66612-1367
Peyton.M.Witham@ks.gov
(785) 296-2866

The designated SPM may be changed by written notification in a timely manner to the Federal (EPA) signatories and incorporated by reference herein without amending this Contract.

3. Authority to Approve Minor Modifications

The RPM and the SPM have joint authority to approve minor modifications to the PWS, including minor schedule delays, without the need for amendment of the Contract, provided the modifications do not require a change in the selected remedy addressed under this Contract or cause the project cost to exceed the remedial action cost estimate. Such modifications must be in writing and approved by the RPM and SPM.

ARTICLE XI. CERCLA ASSURANCE: OPERATION AND MAINTENANCE

In accordance with CERCLA §104(c)(3)(A), and 40 CFR 300.510 (c)(1), the State hereby assures that the operation and maintenance (O&M) of implemented remedial actions addressed under this Contract will remain in effect for the expected life of such actions. The State also guarantees, pursuant to 40 CFR 35.6105(b)(1), that, if the designated agent, KDHE, conducting O&M on behalf of the State, defaults, the State will be responsible for assuming all O&M activities.

In addition, when applicable, once institutional controls identified in this contract have been implemented, the State assures that the institutional controls will be maintained and enforced as specified in the O&M Plan or Institutional Control Implementation and Assurance Plan (ICIAP).

In accordance with 40 CFR 300.510(c)(1), the State and the EPA shall consult on a plan for O&M prior to the initiation of each remedial action addressed under this Contract. The draft O&M Plan will continue to be refined during the remedial action, and the O&M Plan will be updated by the State and/or the EPA as conditions change during the long-term response action and O&M. As applicable, an ICIAP may also be developed.

ARTICLE XII. CERCLA ASSURANCE: TWENTY-YEAR WASTE CAPACITY

The EPA's 2019 National Capacity Assessment shows that there is adequate national capacity for the treatment and disposal of hazardous waste through calendar year 2044. This assessment included data provided by the State for the 2017 National Biennial RCRA Hazardous Waste Report.

Based upon the assessment and other data, the EPA expects that there will be adequate national hazardous treatment and disposal capacity during the 20-year period following signature of this Contract. Based on the EPA's expectation, the State hereby assures the availability of hazardous waste treatment or disposal facilities for the next 20 years, following signature of this Contract, pursuant to CERCLA §104(c)(9).

To ensure the continued availability of capacity for the treatment and disposal of hazardous waste, the State agrees to work with the EPA to meaningfully participate in the national capacity planning process.

ARTICLE XIII. CERCLA ASSURANCE: OFF-SITE STORAGE, TREATMENT, OR DISPOSAL

Pursuant to CERCLA §§104(c)(3)(B) & 121(d)(3), EPA and the State have determined that off-site treatment, storage, or disposal of hazardous substances is not required for this response action.

ARTICLE XIV. OUT-OF-STATE TRANSFERS OF CERCLA WASTE

The EPA or the State must provide written notification of out-of-state shipments in accordance with 40 CFR 35.6120.

ARTICLE XV. CERCLA ASSURANCE: REAL PROPERTY ACQUISITION

The EPA may determine that an interest in real property must be acquired to conduct a response action. The EPA may acquire an interest in real estate to conduct a remedial action only if the State in which the interest to be acquired is located provides assurances that the State will accept transfer of the interest upon completion of the remedial action.

The State shall not acquire any interest in real property without prior written concurrence by the EPA.

If an interest in real property is required, EPA shall acquire such interest consistent with CERCLA §104(j) and pursuant to 40 CFR 300.510(f), and 40 CFR 35.6105(b)(5) & 35.6805(i)(4). The State assures it will accept the transfer of such interest, including institutional controls restricting the use of the real property, on or before completion of the remedial action. The State provides this assurance even if it intends to transfer this interest to a third party, or to allow a political subdivision to accept transfer on behalf of the State. If the political subdivision is accepting the transferred interest in real property, the State guarantees

that it will accept transfer of such interest in the event of default by the political subdivision. If the State or political subdivision disposes of the transferred real property, it shall comply with the requirements for real property in 2 CFR 200.311.

If an interest in real property is required, the State assures it shall acquire such interest, pursuant to a Cooperative Agreement, and consistent with CERCLA §104(j) and pursuant to 40 CFR 300.510(f), and 40 CFR 35.6105(b)(5) & 35.6805(i)(4). The State shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and its implementing regulations, set forth at 49 CFR Part 24, in acquiring any interests in real property. The State provides this assurance even if it intends to transfer this interest, including institutional controls restricting the use of the real property, to a third party. If a political subdivision is accepting the interest in real property, the State guarantees that it will accept transfer of such interest in the event of default by the political subdivision. If the State or political subdivision disposes of the transferred real property, it shall comply with the requirements for real property in 2 CFR 200.311. The direct, out-of-pocket expenditures incurred by the State, if any, for acquiring any such interest in real property shall be accepted, after being submitted by the State and verified by the EPA, as credit to satisfy the State's cost-share requirements in this Contract.

ARTICLE XVI. CERCLA ASSURANCE: PROVISION OF STATE COST SHARE

4. Determination of Cost Share

Pursuant to CERCLA §§104(c)(3) & 104(d)(1), EPA must determine whether the State or political subdivision performed operations at the Site at the time of release to determine the State's cost share.

This Site was not operated by the State or political subdivision thereof, either directly or through a contractual relationship or otherwise, at the time of any disposal of hazardous substances at the facility. Therefore, the State's cost share for the remedial action provided under this Contract is 10 percent.

5. Cost Share Assurance

Pursuant to CERCLA §104(c)(3), the State assures it will seek sufficient funding to pay its State cost share as set forth in the Payment Schedule subparagraph of the Cost Share Conditions provision of this Contract. Payments or encumbrance of funds shall be subject to the availability of funds appropriated by the State legislature. No provision herein shall be interpreted to require obligation or payment of funds in violation of applicable State law.

If the State is unable to make all or part of any payment required as set forth in the Payment Schedule subparagraph of the Cost Share Conditions provision of this Contract, the State shall notify the EPA of that fact as soon as practicable, but no later than 90 days before the due date for the given payment. The EPA and the State may revise the payment schedule in this Contract to allow the State additional time to pay its full cost share, but only to the extent consistent with law, and the EPA regulation, and in consideration of the EPA policy and guidance. Any agreement between the EPA and the State to revise the payment schedule must

be documented in an amendment to this Contract. If a new payment schedule cannot be agreed upon, the EPA may be required to suspend some or all work at the Site or may seek to terminate this Contract (See Termination of this SSC provision) and enforce the payment terms associated with the EPA's expenditures, including costs incurred by the EPA as a result of suspending or terminating work.

If the EPA does not have the necessary funds available to continue the remedial action at any given time during the term of this Contract, the EPA will notify the State as soon as practicable and will meet with the State to determine the appropriate action, including modifying the payment schedule or terminating the Contract, given the absence of, or a reduction in, funding.

ARTICLE XVII. COST SHARE CONDITIONS

6. Cost Estimate

The estimated cost of the remedial action(s) and long-term response action(s) provided under this Contract is $5,729,677. This estimate excludes the EPA's intramural (i.e., payroll and travel) and indirect costs. The EPA expects to use approximately $5,729,677 in funds provided by the Infrastructure Investment and Jobs Act of 2021 (infrastructure funds) to conduct a portion of this remedial action. The EPA expects to use approximately $70,000 of the total cost from the special account to allow the use of unmanned aerial systems (UAS) which is currently prohibited for funding under the infrastructure funds.

The total amount of $5,729,677 in infrastructure funds and special account funds do not require cost share (the final amount will be determined during final financial reconciliation of the SSC).

As a result, the current estimated cost of the response action that is subject to cost share is $0. The estimated State cost share is $0.

The EPA may not expend appropriated funds in excess of this cost estimate, nor shall the State's assurance exceed the cost share amount identified in this provision. Any increase in the cost estimate for this remedial action, the State's share, or modifications that exceed the PWS for this Contract require an amendment to this Contract.

7. Basis for Calculating Cost Estimate

The estimated cost is derived from the Remedial Design, previous experience with remedial actions conducted in Cherokee County, and includes contingencies for change orders, which may or may not be executed, and construction management services.

8. Settlement Proceeds and/or Use of Infrastructure Funds

The EPA expenditures derived from a settlement (or other instrument) with potentially responsible parties (PRPs) ("special account funds") or funds provided by the Infrastructure Investment and Jobs Act of 2021 ("infrastructure funds") to perform work provided under this

SSC do not require State cost share. Such expenditures will not alter the cost share percentage (i.e., 10% or 50%) owed by the State for the portion of the future work conducted that is subject to cost share requirements. The use of such funds to conduct any portion of the work under this SSC must be addressed no later than during final financial reconciliation (See Final Financial Reconciliation provision).

9. Periodic Financial Review

The EPA and the State are both responsible for reviewing cumulative expenditures for the work provided under this SSC on a quarterly basis. Such a review may also include a review of credits and in-kind services, use of contingency funds, cost share payments, and SSC cost estimates. Once expenditures incurred are 90% of the estimate, the parties agree to consult on the necessity to amend the cost estimate. Failure to consult does not preclude amendments to this Contract to amend the cost estimate.

10. In-kind Services

The Support Agency (State) may provide equipment and services (in-kind services) to satisfy its cost share requirements, which is documented in a Support Agency Cooperative Agreement (SACA) with the EPA. The use of the SACA as a vehicle for providing cost share must be documented in the SSC. The recipient must comply with applicable requirements regarding in-kind and donated services pursuant to 2 CFR 200.306. In-kind services are not credit and cannot be reimbursed to the State nor used to satisfy cost share requirements at another site.

11. Credit

Credit may be used to satisfy the State's cost-share requirements in this Contract. Credits are limited to State, site-specific, expenses that the EPA determines to be reasonable, documented, direct, out-of-pocket expenditures of non-Federal funds for remedial action, as defined in CERCLA §101(24), that have not been previously applied or reimbursed, and that are consistent with a permanent remedy at the Site. Documented excess credit cannot be reimbursed to the State but may be used to satisfy cost share requirements at another site (See Final Financial Reconciliation provision).

EPA has authorized the State to incur expenditures for remedial action provided under this SSC to obtain credit. After the EPA verifies the State's claim for CERCLA credit pursuant to 40 CFR 35.6285(c)(2), this Contract will be amended to use the credit to satisfy the State's cost-share requirements in this Contract.

12. Payment Schedule

The State will make annual payments totaling ten percent (10%) of the EPA's Remedial Action (RA) completed under this SSC minus the use of special account funds by the EPA. The initial payment will begin one year after the start of the RA. The EPA will provide the State with an annual accounting of actual costs expended on the Site by the EPA. KDHE

reserves the right to request supporting documentation for non-contractual and/or miscellaneous costs. The State will only make payments on KDHE-approved costs, including up to the original SSC amount and any State-approved SSC amendments. The annual billing will be through the end of the calendar year and EPA will make best efforts to provide the billing between April 1 and June 1 of the following year. The EPA will not bill the State prior to April 1 or between June 1 and June 30 of each calendar year. Any EPA bill received by the State during the period of June 1 through June 30 may be deemed by the State to have been received on July 1 of such calendar year.

Payments shall become due ninety (90) days after receipt by the State of EPA's annual accounting statement of the actual RA costs incurred by the EPA. No more than 90% of the State cost share shall be paid prior to receipt of the final financial reconciliation. The final payment shall become due ninety (90) days after the EPA submits to the State a final financial reconciliation pursuant to paragraph 27 (Final Financial Reconciliation).

The State may prepay any portion of the required cost-share up to ten percent (10%) of the actual RA costs incurred by the EPA, minus the use of special account funds by the EPA. The State assures its cost-share obligation for State-approved actual RA costs at the Site which shall be adjusted at reconciliation as provided in Article 27 (Final Financial Reconciliation) below.

All State payments shall be made payable to the EPA and sent to the Regional Financial Management Office as specified below:

United States Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, Missouri 63197-9000

In the event the EPA does not receive an annual payment or acceptable credit within 1 year of the due date, interest shall accrue from the due date in accordance with 2 CFR 200.345. Interest will be charged at the rate established for the Superfund Trust fund.

The due date is the date or dates specified in this Contract unless the State invokes the Issue Resolution provision set forth in this Contract. If issue resolution is invoked, for purposes of interest calculation, interest will accrue on the unpaid portion of the final resolution amount beginning on the established invoice date above, unless otherwise provided for in the final dispute resolution decision.

ARTICLE XVIII. SITE ACCESS

The EPA and the State shall each make best efforts to secure their own separate access to the Site and adjacent properties as well as all rights-of-way, leases, easements, and other instruments necessary to implement the response actions and O&M described in the PWS of this Contract. The EPA and the State will each attempt to secure access to the Site, as appropriate, for itself, its agents, and representatives, and for contractors performing the work

under the PWS of this Contract.

In entering into any access agreement, the EPA will use its best efforts to negotiate for continuous and transferable access rights to all elements of the PWS of this Contract, and, upon transfer to the State, shall assign its access rights to the State. As requested by the EPA, the State, to the extent of its legal authority, shall assist EPA in securing Site access and shall cooperate with the EPA to satisfy all Federal, State, and local requirements for permits and approvals in accordance with CERCLA §121(e). Compliance with local requirements for permits or other local regulations shall be the responsibility of the EPA contractor(s).

The inability of the EPA or the State to obtain access necessary to implement the elements of the PWS of this Contract may require an amendment to, or termination of, this SSC (See Termination of this SSC provision).

With reasonable notice to the RPM, and upon condition that they comply with any site safety plan then in effect, representatives of the State shall have access to the Site. Representatives of the federal government will coordinate access to the Site in advance with the SPM.

ARTICLE XIX. STATE REVIEW

The State must review and comment on the response actions provided under this Contract. Unless otherwise stated in the SSC, all time frames for review must follow those prescribed in the NCP. The EPA and the State hereby agree to the following binding time frame for review and comments on matters relating to the implementation of the response actions provided under this Contract: 60 days.

ARTICLE XX. REPORTS

The EPA and the State agree to exchange reports referenced in the Statement of Work.

ARTICLE XXI. RECORDS ACCESS

At the State's request, and to the extent allowed by federal law, the EPA shall make available to the State any information in its possession concerning the Site. If any information is provided to the EPA with a claim of confidentiality of business information, it will be treated in accordance with 40 CFR Part 2, Subpart B. The EPA may only share confidential business information with the State if it is permitted under 40 CFR Part 2, Subpart B.

At the EPA's request, and to the extent allowed by State law, the State shall make available to the EPA any information in its possession concerning the Site. The EPA shall not disclose information submitted by the State under a claim of confidentiality of business information unless the EPA is required to do so by federal law and has given the State advance notice of its intent to release that information. Absent notice of such claim of confidentiality of business information, the EPA may make said information available to the public without further notice.

ARTICLE XXII. RECORDS RETENTION

Where the State must maintain records on a site-specific basis, the State must comply with the requirements regarding record retention described in 40 CFR 35.6705.

ARTICLE XXIII. INSPECTION OF THE REMEDY

13. Joint EPA/State Pre-final Inspection

A joint EPA/State pre-final inspection will be conducted at the conclusion of construction, prior to final stabilization, of each remedial action addressed by this Contract. This inspection is separate from the construction contract pre-final inspection, although both inspections may be conducted concurrently. The joint EPA/State pre-final inspection will be led by the RPM accompanied by the SPM. The joint EPA/State pre-final inspection generally will consist of a walk-through inspection of the constructed remedial action. This inspection will determine whether each element of work is complete and consistent with the contract documents and the EPA approved remedy. Jointly, the EPA and the State will determine if there are any outstanding construction items. An attempt shall be made to determine resolutions for all remaining items. The EPA will provide an inspection report to the State for review and comment. If the EPA/State pre-final inspection results in significant outstanding items, the EPA may choose to delay the determination that construction of the remedial action is complete until the significant items have been resolved.

14. Joint EPA/State Final Inspection

A joint EPA/State final inspection will be conducted to determine that each remedial action addressed under this Contract is functioning properly and performing as designed and after final stabilization. The joint EPA/State final inspection will be led by the RPM, accompanied by the SPM and other parties, where appropriate, from the EPA/State pre-final inspection.

The EPA/State final inspection generally will consist of a walk-through inspection of the constructed remedial action, with the inspection focusing on the items necessary to ensure the remedial action is operating properly and performing as designed. The RPM and the SPM will also confirm that all outstanding items from the EPA/State pre-final inspection have been resolved.

ARTICLE XXIV. OPERATIONAL AND FUNCTIONAL

The completion of the joint EPA/State final inspection marks the point in time when construction of each remedial action is considered complete for purposes of this Contract. It is used to document the beginning of the up to one-year O&F period. Consistent with 40 CFR 300.435(f)(2), the "remedy becomes operational and functional (O&F) either one year after construction is complete, or when the remedy is determined concurrently by EPA and the State to be functioning properly and performing as designed, whichever is earlier." EPA's intention is to schedule and conduct a joint EPA/State final inspection within one year of the completion of the joint EPA/State pre-final inspection. The completion date of the EPA/State final inspection, assuming it is done within one year of the pre-final inspection, will be used as the date of the O&F determination. If the joint EPA/State inspection and does not occur

within one year, the NCP (40 CFR §§ 300.435(f)) provides EPA the discretion to make an O&F determination without this inspection. As discussed in §300.435(f)(2) of the NCP, "EPA may grant extensions to the one-year O&F period, as appropriate." When the O&F determination has been made, EPA will provide written notification to the State documenting the O&F determination. Since the O&F time period is part of the remedial action, the State cost share is applicable.

In accordance with 40 CFR §300.435(f)(1), the O&F determination results in the transfer of each remedial action to the State for O&M or initiation of the long-term response action (LTRA), as described in the Ground and Surface Water Restoration Provision.

The Remedial Action Report will be prepared once each remedial action is O&F. The state will review and comment on the draft Remedial Action Report. After the EPA approves the Remedial Action Report, the EPA will provide a copy to the State.

ARTICLE XXV. GROUND AND SURFACE WATER RESTORATION (LONG-TERM RESPONSE ACTION)

The remedial action provided under this Contract may include ground or surface water restoration. Pursuant to CERCLA §104(c)(6), the EPA is authorized to share in the cost of the restoration of ground or surface water for a period of up to ten years or until the level of protectiveness, as defined in the Record of Decision, is achieved, whichever comes first. The ten-year period will adhere to the provisions provided in 40 CFR 300.435(f)(3). This ten-year period of ground or surface water restoration is referred to as long-term response action (LTRA). The O&F determination marks the initiation of the LTRA.

The State has elected not to take the lead for the LTRA. The EPA shall conduct the LTRA. The State cost share, 10 percent, shall be applicable.

ARTICLE XXVI. PERSONAL PROPERTY

The State agrees that it will accept title to fixed-in place equipment, and equipment that is an integral part of services to individuals, used as all or part of the remedy. The EPA shall no longer have an interest in this equipment once installed and EPA has certified that the remedy is operational and functional. The State must use, manage, and dispose of equipment acquired under this Contract in accordance with state laws and procedures.

ARTICLE XXVII. FINAL FINANCIAL RECONCILIATION

The financial settlement and final financial reconciliation of remedial action costs (including all change orders, claims, total expenditures, total collections, exclusion of special account or infrastructure expenditures, verification and application of credit and in-kind services, final payments, refunds, or transfers of State overpayments, etc.) must be completed and documented to ensure that both the EPA and the State have satisfied the CERCLA cost share requirement. Final financial reconciliation must be completed before this Contract can be administratively closed and must be documented pursuant to the Administrative Closure subparagraph of the Conclusion of this SSC provision. The EPA will provide draft financial

reconciliation documentation to the State within one year of the "O&F determination" for the remedial action conducted under this Contract.

Credit and in-kind services must be used first to satisfy the State's cost share requirements at this Site. Per the State's request, the EPA may use verified excess credit from this Site to satisfy cost share requirements at another site, but only after final financial reconciliation has been completed. Excess credit cannot be refunded to the State. In-kind services cannot be used at another site and cannot be refunded to the State. Cash overpayments will be refunded to the State, or at the State's direction, will be used to satisfy cost-share requirements at another site.

ARTICLE XXVIII. SSC AMENDMENTS

This Contract may be amended to alter any provision of this agreement, but only to the extent consistent with federal and state laws and regulations, and in consideration of the EPA policy and guidance. Amendments are required when there are changes in the selected remedy addressed under this Contract, project costs exceed the remedial action cost estimate, payment schedules are altered, to document Administrative Closure or Final SSC Conclusion, or when alterations affect the State's assurances pursuant to the NCP and CERCLA. Any amendments that affect the PWS or the remedial cost estimate under this Contract must include an updated PWS reflecting these changes. All amendments to the Contract must be agreed to, in writing, by the signatories, except as provided in this Contract (See Authority to Approve Minor Modifications subparagraph) and must be reflected in all response agreements affected by the change(s).

ARTICLE XXIX. LIST OF SUPPORT AGENCY COOPERATIVE AGREEMENTS

The following list includes all support agency cooperative agreements currently in effect for the Site:

Agreement/Date	**Signatories**
SACA V99768409/July 1, 2018 to June 30, 2022	Lee Norman (KDHE) and Debbie Titus (EPA)
Construction V97755601/July 29, 2016 to June 30, 2022	Susan Mosier (KDHE) and Debbie Titus (EPA)
EUCs V97755801/June 1, 2019 to June 30, 2022	Susan Mosier (KDHE) and Debbie Titus (EPA)

ARTICLE XXX. LITIGATION

15. No Waiver to Bring Action

This Contract does not constitute a waiver of the EPA's rights or the State's rights, nor can either party waive the other party's rights, to bring an action against any person or persons for liability under CERCLA §106, to compel cleanup, or for cost recovery under CERCLA §107, or to bring an action against any person or persons under any other statutory provision or common law.

16. Asserting Claims

The EPA and the State may be entitled to assert claims against a third party (herein referred to as the "potentially responsible party" or "PRP," whether one or more parties) for reimbursement of any services, materials, monies, or other things of value expended by the EPA or the State for Fund-financed response activity, related to the remedial action described in the PWS under this Contract.

i. The EPA and the State hereby agree that they shall cooperate in, and coordinate efforts to, recover their respective costs of response actions taken at the Site, including the negotiation of settlements and the filing and management of any judicial actions against PRPs. The EPA and the State also hereby agree that neither shall enter a settlement with, or initiate a judicial or administrative proceeding against, a PRP for the recovery of such sums, except after having given notice in writing to the other party to this Contract at least thirty (30) days prior to the date of proposed settlement or commencement of the proposed judicial or administrative proceedings.

ii. Neither party to this Contract shall attempt to negotiate for, or collect, reimbursement of any expenditures incurred for work performed under this Contract on behalf of the other party, and authority to do so is hereby expressly negated and denied. A State must enter its own settlement with a PRP, or be a party to an EPA settlement, to obtain reimbursement for its payments to the EPA.

iii. Unless otherwise specified in a settlement (or judgment), any settlement for past costs that the EPA enters, to which the State is not a party, only reimburses the EPA's expenditures of appropriated funds. The EPA will neither reimburse the State for cost share payments it has made to the EPA nor reduce the cost share owed pursuant to the Cost Share Conditions provision in this Contract based on the EPA's recovery of past costs. Any settlement into which the State enters, to which the EPA is not a party, only reimburses the State's costs and does not affect the costs the EPA has or will incur under this Contract, nor the share owed to the EPA pursuant to the Cost Share Conditions provision in this Contract.

ARTICLE XXXI. ISSUE RESOLUTION

In the event issues arise relating to the Site, or questions are raised about any term of this Contract, such issues, to the extent possible, will be resolved by the RPM and the SPM. Note that matters unrelated to this SSC, such as those between the State and other federal agencies, are not subject to the terms of this Contract since the SSC is a bilateral agreement.

If any such disagreement cannot be resolved by the RPM and the SPM, it shall be referred, as necessary, to the Regional Superfund Branch Chief and KDHE Assessment and Restoration Section Chief, the Regional Superfund Director (or designee) and KDHE Bureau of Environmental Remediation Director (or designee), the Regional EPA Administrator (or designee) and KDHE Division of Environment Director (or designee), and, finally, the Assistant Administrator, Office of Land and Emergency Management (OLEM), U.S. EPA (or

designee) and secretary of the KDHE (or designee), for final agency action. The EPA and the State agree that the final decisions achieved resulting from this process shall be considered final agency actions. Nothing in this agreement precludes a party from pursuing other available adjudication processes should the final agency actions not lead to a mutual agreement. Proposals to compromise debts owed to the EPA under this Contract must be referred to the EPA Claims Officer or the Department of Justice, depending on the value of the compromise (40 CFR 13.31).

Contractual resolutions and final audit determinations, impacting work performed under this Contract, shall also constitute final agency actions, and may require amendment to this SSC.

Disputes associated with cooperative agreements are subject to the dispute resolution procedures described in 2 CFR Part 1500, Subpart E §§1500.12-1500.19.

ARTICLE XXXII. SANCTIONS FOR FAILURE TO COMPLY WITH TERMS OF THIS SSC

The EPA may seek to enforce this Contract or to recover any costs incurred due to a breach of the SSC in the appropriate Federal district court. If the State fails to comply with the terms of this Contract, any CERCLA assurance, and/or the negotiated payment terms, the EPA may, after providing sixty days' notice, proceed under the provisions of CERCLA §104(d)(2). Other signatories to this Contract may seek remedies in the appropriate court of competent jurisdiction.

ARTICLE XXXIII. EXCLUSION OF THIRD-PARTY BENEFITS

This Contract benefits only the State and the EPA. It extends no benefit or right to any third party that is not a signatory to this Contract.

ARTICLE XXXIV. LIABILITY

The EPA does not assume any liability to third parties with respect to losses due to bodily injury or property damages that exceed any limitations contained in applicable federal law. The State does not assume any liability to third parties with respect to losses due to bodily injury or property damages that exceed any limitations contained in applicable state law.

ARTICLE XXXV. RESPONSIBLE PARTY ACTIVITIES

If, at any time during the period of this Contract, performance of either all or part of the work provided under this Contract is voluntarily undertaken or undertaken for any other reason by a PRP or entities not party to this Contract, then this Contract will be modified or terminated (See Termination of this SSC provision) as appropriate. Upon modification or termination, the parties to this agreement shall be relieved from further duties to perform those actions undertaken by PRPs or entities not party to this Contract.

ARTICLE XXXVI. TERMINATION OF THIS SSC

The parties may agree to enter into a written termination agreement, which will establish the

effective date for the termination of this Contract and final financial reconciliation (See Final Financial Reconciliation provision), including the amount and date of any sums due either party. Reconciliation costs shall also include cost sharing of any costs associated with termination of this Contract. If the parties cannot agree to enter into a termination agreement, they may engage in the process described in the Issue Resolution provision of this Contract.

ARTICLE XXXVII. CONCLUSION OF THIS SSC

There are two components associated with the completion of this Contract: Administrative Closure and Final SSC Conclusion.

17. Administrative Closure

To administratively close this Contract, the signatories must concur through amendment to this Contract that the EPA and the State have:

i. Satisfactorily completed the response activities under this Contract (See 40 CFR 35.6805(q) and Inspection of the Remedy provision);
ii. Completed final financial reconciliation for this Contract (See 40 CFR 35.6805(i)(5) and Final Financial Reconciliation provision);
iii. Accepted transfer of any Federal interest in real property (See 40 CFR 35.6805(i)(4) and CERCLA Assurance: Real Property Acquisition provision), as applicable; and
iv. Assumed responsibility for all future O&M (See 40 CFR 35.6805(i)(1) and CERCLA Assurance: O&M provision), as applicable.

After the administrative closure of this SSC, the EPA will continue to monitor, as warranted, compliance of the State's assurance to provide for all future O&M as required by CERCLA §104(c).

18. Final SSC Conclusion

Although this Contract may be administratively closed once the criteria in the Administrative Closure subparagraph are met, this Contract, specifically the O&M assurance provision, will remain in effect if O&M is required at this Site, unless the Contract is terminated pursuant to this subparagraph.

The conclusion of this SSC shall only occur once O&M is concluded pursuant to an amendment to this Contract, a PRP has taken over O&M requirements for the Site and this Contract is terminated, or this Contract is terminated for other reasons (See Termination of this SSC provision).

ARTICLE XXXVIII. USE OF ELECTRONIC SIGNATURES

The EPA agrees that the State may execute this SSC and subsequent Amendments by electronic signature. All electronically signed documents must be reproducible in a human-intelligible form and clearly indicate: (1) that the document was electronically signed; (2) who signed the document; (3) the title of the electronic signer; and (4) the date and time it was

signed. The State may deliver electronically signed documents by facsimile transmission or email to EPA Marc Kingston at kingston.marc@epa.gov, including the EPA's Cincinnati Finance Office, and shall be deemed original documents. The EPA and State acknowledge that electronic signatures carry the legal effect, validity, or enforceability of handwritten signatures. Therefore, parties shall not deny the legal effect, validity, or enforceability of records containing electronic signatures that they transmit and receive on the ground that such records, including the signature(s), are in electronic form.

ARTICLE XXXVIV. SIGNATURES

In witness whereof, the parties hereto have executed this Contract.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Scott D. Hayes

Digitally signed by Scott D. Hayes
Date: 2022.07.15 08:00:54 -05'00'

Date: 7/15/22

Scott Hayes, Acting Director
Superfund & Emergency Management Division
U.S. Environmental Protection Agency, Region 7

STATE OF KANSAS:

Janet Stanek

Date: 8-11-2022

Janet Stanek, Secretary
Kansas Department of Health and Environment
State of Kansas

APPENDIX I

PERFORMANCE WORK STATEMENT

APPENDIX I

PERFORMANCE WORK STATEMENT
OU 8 PHASE I RAILROADS
CHEROKEE COUNTY SUPERFUND SITE
CHEROKEE COUNTY, KANSAS

THIS PERFORMANCE WORK STATEMENT IS WRITTEN AS THE DESCRIBED WORK WITHIN WILL BE COMPLETED BY AN EPA CONTRACTOR.

I. PURPOSE

The purpose of this Performance Work Statement (PWS) is to outline the performance of a remedial action for the mine waste located at the Sunflower Mine Complex in the Baxter Springs subsite (Operable Unit 03 [OU3]) and three segments of railroad line located in the Railroads OU (OU8) portion of the Cherokee County Superfund site (Site) (Attachment A). The Baxter Springs OU3 subsite is located along the Kansas-Oklahoma border in the south-central portion of Cherokee County. This PWS addresses surficial mine waste areas and contaminated sediment located within and adjacent to the former Sunflower Mine Complex South of 19th Street and east of SE 30th St., west of Baxter Springs, KS.

The selected remedies for both OU3 and OU8 consist of excavation, consolidation, and disposal of mine waste and associated soil/sediments contaminated with heavy metals. The remedial action will be conducted for the U.S. Environmental Protection Agency (EPA) in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the final plans and specifications developed during the remedial design (RD), the 1997 Record of Decision (ROD) and subsequent ROD Amendments issued in September 2006 and September 2016.

For this PWS, the term "mine waste" includes both visible mine waste (chat, tailings, and waste rock) and underlying soil/sediment contaminated with heavy metal concentrations exceeding the cleanup standards/goals.

II. BACKGROUND

The Site was listed on the National Priorities List in 1983 because of heavy metals contamination in groundwater, soils, and the presence of surficial mine waste, all of which constituted a significant source of potential heavy metal exposure to people and the environment. The primary contaminants of concern are lead, cadmium and zinc. The Site spans 115 square miles in southeast Kansas and is part of the larger 2,500 square mile Tri-State Mining District of southeast Kansas, southwest Missouri, and northeast Oklahoma. The Site is subdivided into nine operable units and subsites.

Mining was conducted in Cherokee County, Kansas for approximately 100 years from the middle 1800s to 1970. The ore deposits at the Treece subsite (OU4) are approximately 300 feet below ground surface in Mississippian-age limestone units that are overlain by Pennsylvanian-age shale deposits. The majority of the mining was conducted by underground room and pillar methods where the mined ore was hoisted from the underground workings and treated at mills on the surface. The mills crushed the crude ore to less than 5/8-inch diameter, creating chat. Then the ore was concentrated using gravity separation processes or, after 1920, froth-flotation processes. Both methods created tailings. During the years the mines operated, rail lines were constructed in Cherokee County to connect mining and ore

processing locations throughout the County. The ballast material used in the railroad beds was composed of chat from surrounding mine waste piles. The chat piles and tailings deposits continue to contaminate surface water, groundwater, and surface soils with heavy metals, primarily lead, zinc, and cadmium.

A number of open mineshafts and subsidence pits are scattered throughout the Baxter Springs subsite (OU3), creating significant physical risk to people in the area. Several vent pipes, wells, and mineshafts are identified on the design drawings for abandonment. However, additional vent pipes, wells, and mineshafts that require abandoning may be discovered during the construction activities.

III. PERFORMANCE TASKS

The following tasks shall be performed.

Task 1: Access and Documentation

Access is not in place for all properties in the work area limits. The Contractor is responsible for obtaining access agreements for those properties that currently do not have such agreements. EPA has an available site breakdown of available access agreements and individual impacted parcels per work area that is available upon award. For cost estimating purposes, assume access is required to six (6) parcels.

The Contractor will work with the Contracting Officer's Representative (COR) to coordinate and document property access with property owners and provide copies of access agreements after contract award. If after three attempts via telephone, email/text, and letter, the property owner hasn't responded, the contractor shall provide documentation of access attempts to the EPA. The EPA will then take the lead on property access for those parcels still missing access. Attempts to gain access will be documented in a spreadsheet that includes, but is not limited to:

- property owner name and address,
- parcel number,
- Section Township and Range (STR) if a large parcel without a street address,
- date time and type of each attempt; and
- other relevant comments or information regarding attempted access, such as aggressive animals, works nights/sleeps days, gone during week, was uncooperative in person, etc.

The Contractor shall collect access agreements with property owner(s) in coordination with the COR. The Contractor shall coordinate a pre-construction site walk with the property owner(s) and provide a succinct description of the work to be conducted. This discussion shall be clear to minimize misunderstandings between the property owner and the contractor. The pre-construction site walk shall give the property owner an opportunity to accompany the Contractor, to identify specific issues that will be addressed during remediation and obtain the property owner's signature or verbal/written consent on the access agreement, as needed. All notes and side agreements that result from this meeting shall be documented and submitted to the COR in writing and included in the weekly report. The pre-construction site walk shall also include documentation of site conditions of areas to be disturbed, condition of driveways, sidewalks, structures, landscaping, etc. Note: Preventable damage to real property due to operator error or negligence shall be the responsibility of the contractor and not EPA.

Task 2: Site Preparation and General Activities

The Contractor shall perform the following tasks:

1. Mobilization.
2. Temporary Access/Haul Road Improvements (Property owners may want minimal attractive nuisances left in-place post construction, therefore, maintenance road to the repositories should be minimal [e.g., Trotter property]).
3. Stabilized Construction Entrances to include leaving gates at completion of the project that match original site conditions per property owner's request (e.g., Trotter property).
4. Clearing and grubbing which shall consist of the removal and disposal of trees, stumps, roots, logs, shrubs, grasses, weeds, fallen timber and other surface litter unless the pre-construction site walk identified any of these items that would need to be left in place.
5. X-ray fluorescence (XRF) grid survey and sampling (see RD Drawing C-01A for 2019 XRF grid survey).
6. Solid Waste Disposal.
7. Maintain existing fencing for livestock or construct temporary fencing, as needed, for livestock management during remedial activities.
8. Demobilization.

The Contractor shall perform waste delineation and XRF Grid Survey and Sampling in the price schedule, based on field tests with data summaries provided to the EPA prior to proceeding with excavation as shown in the contract Basis of Design (BOD)/specifications and drawings (Attachments B and C). Linear features, such as farm trails or railroad spurs containing visible chat, shall be included in the Contractor's waste delineation and are subject to remediation. Requirements for these activities can be found in Attachment B. For cost estimating purposes, refer to the price schedule for estimated quantities.

Task 3: Mine Waste Removal Requirements

Mine waste, contaminated soil, and sediment shall be excavated, transported, and disposed of in subsidence features or mine shafts or consolidated in designated mine waste consolidation areas (WCA) at existing central repositories located within the Site, as designated on the design drawings in Attachment C. For purposes of this solicitation, refer to Attachment C for the design drawings, particularly Table 2 on sheet G-02 to determine where the waste from each area will be transported. Based on remedial design investigation data, approximately 781,541 cubic yards of mine waste in the multiple work areas will require excavation. For purposes of this solicitation, refer to Attachment B for the BOD/specifications and available data.

Trees and vegetation may be left-in-place during clearing and grubbing and excavation activities upon property owner request. For cost estimating purposes, the contractor may assume approximately 5% of trees and vegetation may be left in-place. The contractor shall discuss this with the property owner during the initial communication and during the pre-construction site walk. Each tree and bush type and size shall have a unique exclusion radius associated as specified in the following table:

Plant Size and Type	Exclusion Radius (feet from trunk)
Small Coniferous	2.5
Medium Coniferous	5
Large Coniferous	7.5
Small Deciduous	2

Medium Deciduous	4
Large Deciduous	6
Large Bush	2
Medium Bush	2
Small Bush	2

The contractor shall refer to limits of disturbance shown on the contract drawings (Attachment C) before initiating remediation activities at each property that requires remediation.

Excavation of the mine waste and contaminated soil shall continue in approximately one-foot lifts until the cleanup criteria are achieved, as determined by confirmation sampling completed by both the Contractor and EPA. Visible mine waste and contaminated sediment from included streams shall be removed until the cleanup requirements are met. The EPA on-site personnel or an EPA Technical Support Contractor will perform quality assurance inspections to ensure that the Contractor has met the cleanup requirements in a work area. If an area has been excavated to approximately five feet below ground surface, the Contractor shall stop excavation and inform the EPA to discuss and determine the feasibility of continuing excavation to a depth greater than five feet in that area. The cleanup requirements are listed in the following table.

Table 1. Soil and Sediment Cleanup Requirements

	Cadmium	Lead	Zinc
Soil	10	400	1,100
Sediment	17.3	219	2,949

Notes:
1. All concentrations are listed as parts per million (milligrams per kilogram).
2. Sediment requirements apply to material within the visibly-defined normal pool banks of the creek channel that is saturated or located below the normal water table during the majority of the year.

The Contractor shall use field screening to guide the excavation. The Contractor shall perform preconfirmation XRF screening to determine if an excavated area or a subset of an excavated area is less than the cleanup requirements. Preconfirmation XRF screening is defined as field screening the base of an excavation with an XRF prior to collecting confirmation samples. If the preconfirmation samples are less than the cleanup requirements, then the Contractor shall notify the EPA that an area is ready for final confirmation sampling. EPA or an EPA Technical Support Contractor will be responsible for conducting confirmation sampling and providing sampling results within five (5) business days of sample collection.

Additionally, certain locations may be over-excavated, at the Contractor's discretion and as approved by the EPA and the property owner, to obtain clean borrow material for backfill. Removal of mine waste and confirmation sampling of potential borrow source material is required prior to over-excavation. Any borrow material from an over-excavated area would be subject to contract specifications located in Attachment B.

The Contractor is directly responsible for repair and/or reimbursement of damages resulting from negligent use of the roads for transportation purposes by the Contractor or the work the Contractor is performing. The Contractor shall also maintain haul roads during the contract to ensure protection of public safety such as temporary road repair (placing rock in potholes, periodic grading as needed to keep road surface free of ruts, potholes, large rocks, soft spots, etc.) and dust/debris control resulting from track out. See Task 10 for deliverables associated with documenting the haul route conditions and

refer to Attachment B for further details. Costs should be incorporated into excavation and hauling items in the price list.

Table 2 on Sheet G-02 of the project drawings found in Attachment C, shows which of the four Waste Consolidation Areas (WCA) where the excavated mine waste will be placed following excavation. Table 2 referenced above, also identifies how much of the OU8 waste will be placed within each WCA. Subsidence pits and mine shafts may be encountered during work activities and shall be used for disposal, refer to Task 8. All remaining mine waste materials shall be transported to the designated waste consolidation areas identified by the EPA. Areas to place material within designated repositories will be identified by EPA and/or the property owner and could be subject to change based on site conditions. The Early Bird repository may have a separate contractor to move waste within the repository so those costs would need to be incorporated in the excavation and hauling CLIN, while other consolidation areas would require the Contractor to manage the waste at the repository. The Contractor shall maintain dust suppression at the repository as needed and reduce any impacts to track-in/track-out materials at the repository entrance.

Dust suppression and air monitoring during excavation and grading activities are required for the repository/work sites. It is the Contractor's responsibility to assess the heavy metal concentrations in the air at the repository and characterize the risks to their employees per OSHA. It is also the Contractor's responsibility to assess particulate and heavy metal concentrations at the fence line of the repositories as needed in response to concerns by neighboring property owners. These are not separately priced line items; therefore, these efforts shall be built into other activities associated with these areas in the price schedule. The need for dust suppression and air monitoring shall be coordinated with the COR, Alt-COR, or Contracting Officer (CO). However, a goal of zero off-site dust emissions and/or runoff from a work area and/or repository is what the contractor will strive to achieve.

Task 4: Mine Waste Covering

If encountered, once subsidence pits and mineshafts are determined to be full, the contractor shall cover them in accordance with the design specifications and drawings. If excavation is necessary and completed around a structure, the contractor shall cover the area in accordance with BOD specifications listed in Attachment B. The soil cover system (also referred to as a repository cap) for subsidence pits and around structures shall be constructed of a minimum of 1.5 total feet (18 inches) of clean earth material that meets contract specifications consisting of a minimum of 1.0 foot (12 inches) of clay material and a minimum of 0.5 foot (6 inches) of topsoil. The repository cap shall be constructed to promote runoff and prevent ponding water. Ancillary construction associated with the repository cap includes drainage let downs, drainage swales and other site improvements to convey surface water off and away from the areas with a repository cap. These features are to be constructed per the RD drawings and specifications.

The repository cap at the Hessee/Lewis and Sunflower mine shall be included in this PWS. This PWS does not include capping and covering at the Early Bird repository.

Task 5: Erosion and Sediment Controls

The Contractor shall install and maintain erosion control measures to control storm water run-on and run-off in the repair areas and repository/waste consolidation areas as described in the RD and associated project plans such as the Stormwater Pollution Prevention Plan (SWP3). Erosion control measures shall be installed prior to any mine waste removal activities and shall remain in place and be properly maintained until vegetation is fully established on the repair areas. Both temporary and

permanent sedimentation and detention basins may be constructed in various areas. Any deviation or modification from the RD and/or work plan shall be approved and documented in advance by the CO or the COR prior to implementation.

Temporary seed species for surface erosion control shall be as specified in Table 2, or a cover crop of other annual grass species and/or legume may be used as temporary cover as directed and/or approved by the CO or COR.

Table 2. Temporary Seed Species Mixture for Erosion Control

Species	Application Rate* (lbs. pure live seed/acre)
Annual Ryegrass	100.0
Brown Top or Pearl Millett	30.0
Oats	100.0
Winter Wheat	100.0
*Note: Rates may be adjusted per the documented recommendation of a seed expert and/or local agricultural extension agent per the approval of the CO or COR	

Temporary seeding shall be applied to areas lacking vegetation if no construction activities will be performed in the area for more than 30 days or if outside the approved seeding window for permanent seeding. Uniformly apply seed during optimum planting season at rates specified in Table 2, unless otherwise approved by the COR and/or the CO. The preferred method of seeding is by drilling the seed into the topsoil. If the Contractor chooses an alternative method, then the next preferable seeding application is hydroseeding with a mulch mixture. If broadcasting and mulching is the selected method of seed application, then the mulch must be crimped in with an appropriate crimping tool (pull behind straw crimper, roller crimper, etc.) before the seed and or mulch can wash or blow off the area of application. The Contractor shall not seed in excess of that which can be mulched on the same day. Weed seed shall be a maximum one percent (1%) by weight of the total mixture and seed must meet state inspection specifications listed in the BOD specs or mandated by the state in which the seed is being utilized. The mixing of seed may be done by the seed supplier prior to delivery, or on site as directed by COR and/or the CO. Substitutions are not allowed without written request and approval from the COR and/or the CO. It is understood that some property owners will ask for a seed mix not specified in the contract. These requests will be evaluated on a case-by-case basis by consulting a seed expert such as a local agronomist, county extension agent, etc. The use of any alternative(s) will be at the approval and discretion of the CO or COR. Seeding is priced on a per acre basis and the unit price must include all aspects of the seed application. The anticipated results will be performance based so all re-attempts that may be required to meet the BOD requirement for vegetative coverage will be covered under the initial unit price. Additional attempts at meeting the revegetation specs will be the responsibility of the contractor.

Note: If the property owner or Contractor, with the property owner's permission, wants to harvest the forage or seed from the temporary cover crop before permanent fall seeding occurs, then that can be discussed/negotiated with the CO or COR in August prior to planning permanent fall seeding efforts. In some areas this may be preferable to overseeding/drilling permanent seed into cover crop and then mowing it down to be used as a mulch for the permanent seed. The local ag extension agent should be consulted in an effort to use and follow local techniques that can maximize revegetation efforts in meeting performance standards found in the BOD specifications and Quality Assurance Surveillance Plan (Attachment D).

Task 6: Regrading and Restoration

Upon completion of mine waste removal, the repair areas (those areas meeting the cleanup requirements) shall be graded to promote proper drainage and eliminate standing water or channeled to an existing pond, as described in the design drawings and BOD. The design drawings require limited placement and compaction of clean imported fill material and topsoil within some of the excavated areas to achieve positive site drainage and reestablish surface vegetation. The design drawings include replacement of gravel roads. Refer to the design specifications, Attachment B, and drawings, Attachment C, for further detail and estimated quantities.

Task 7: Revegetation

Excavation of the contaminated soils beneath the existing mine waste typically results in removal of existing topsoil. All disturbed areas shall be revegetated as specified in the design documents, see Attachments B and C. This task includes the soil fertility tests for soil amendments. EPA approval is required prior to any other vegetation being used that is not identified in the design documents. The Contractor's Revegetation Plan shall provide detailed information on respective borrow sources for select fill and topsoil, organic content of the proposed topsoil, and any special procedures and methods to be implemented during construction to ensure that vegetative growth is established under variable weather conditions.

Refer to the design specifications in Attachment B for further detail. The contractor shall be responsible for ensuring that an effective stand of permanent vegetation be established. This is defined as the perennial portion of the specified seed mix growing as a uniform vegetative cover with a density of 75% of specified seed species over any and all one-acre areas, see Attachment B. The contractor shall monitor the newly established vegetative ground cover and any other erosion control measures and maintain effectiveness for a period of three (3) growing seasons after initial seeding.

In the event the actions of the property owner cause damage, it is the contractor's responsibility to notify the COR and document the issue in writing and with photographs. If the contractor fails to notify the COR and provide documentation, then the contractor may be responsible for repairing damages.

Task 8: Fill and Plug Mine Shafts, Vent Pipes, and Small Subsidence Pits

All mineshafts, vent pipes, and small subsidence pits (approximately 50 feet in diameter or less) encountered during field activities may be filled with on-site mine waste and shall be abandoned in accordance with the design and state requirements. All mineshafts, vent pipes, and small subsidence pits shall be documented geospatially in a Microsoft Excel spreadsheet by the contractor, refer to appropriate EPA SOP for GPS and metadata requirements (Attachment E– SOP 2341.1). In addition to the features marked on the design drawings, additional mine shafts, vent pipes, wells, and pits may be uncovered during the remedial action. The vent pipes and wells may be assumed to have an inside diameter of 10 inches. The mineshafts are assumed to have a typical opening of eight feet by eight feet. Vent pipes and mineshafts are assumed to be approximately 150 feet deep. The EPA does not guarantee these assumptions. Mineshafts and vent pipes shall be addressed in accordance with the design specifications and drawings. They may be filled with on-site mine waste. Prior to plugging, it may be necessary to fill the mineshafts several times as the mine waste settles over time. If a shaft is encountered that cannot be filled with mine waste then it may be necessary to create a polyurethane foam (PUF) bridge to support the shaft plug until it hardens and cures. If the contractor suspects they need to use PUF then the CO/COR will coordinate with KDHE for concurrence and any special procedures/protocols.

Some mill works may be encountered during field activities. The Contractor may choose to remove those mill workings to fill mineshafts, vent pipes, and small subsidence pits or at the request of the landowner. The removal of mill works is not required under this contract. The Contractor may work with the property owner on agreements, outside of EPA, if the property owner is interested in removal. Costs associated with removing mill works are the responsibility of the Contractor and shall not be reimbursed by the EPA.

For mine shafts, vent pipes, and subsidence pits, the Contractor shall install maintenance monuments at the locations per the BOD specifications in Attachment B. The costs of the maintenance boundaries are assumed in the cost for abandonment.

Mine shafts: Although the specifications include provisions for closure of the mineshafts using PUF, it is anticipated that the majority of mineshaft closures can be accomplished by backfilling by other means and materials excluding PUF, as described in the specifications. However, if KDHE recommends plugging a shaft with PUF prior to pouring a reinforced concrete cap per the specs, then PUF closure shall be completed per specifications. For cost estimating purposes, assume 90% of mineshaft abandonments without PUF and 10% of mineshaft abandonment with PUF during each contract period. Refer to the price schedule but at a minimum include pricing for one PUF closure per contract period, with the knowledge that it is more than likely a PUF closure will not be required for 90% of the shafts encountered within the contract areas.

Subsidence features: Subsidence features shall be covered in accordance with the design specifications and drawings as soon as they are determined to be full. They may be filled with on-site mine waste. The cover system shall be constructed of a minimum of 1.5 total feet (18 inches) of clean earth material consisting of a minimum of 1.0 foot (12 inches) of clay material and a minimum of 0.5 foot (6 inches) of topsoil. For cost estimating purposes, assume a subsidence feature will cover approximately 225 square feet. The EPA does not guarantee these assumptions.

Task 9: Surveys

A third-party surveyor hired by the Contractor shall survey work areas at various points during construction, labeled with numbers 1-4 for each phase in this task. The phases are specified below:

1. BASELINE - The Contractor shall conduct their own baseline survey. EPA has PDF and/or CADD files of some of the work areas from previous contractors which are available upon request.
2. A second survey shall be completed at each work area following completion of excavation. This will allow for an accurate calculation of the quantity of waste removed for true up billing purposes of mine waste/sediment excavation.
3. A third survey shall be completed after all select fill has been placed and graded so that an accurate count of fill placement can be made, and quantities trued up for final CLIN payment.
4. A final survey of each work area is required to accurately calculate the amount of topsoil placed, the depth of said topsoil and the final as-built elevations for completion reports.

All surveys shall be conducted by a third-party surveyor within 15 calendar days of completion of each work phase. The as-built completion survey/report shall be completed within 15 calendar days of completing all fill work and final grading. Final payments will be based on these surveys and failure to meet these requirements accurately and completely could result in delayed or even reduced unit price quantity payments.

If the Contractor plans to utilize unmanned aircraft systems (UAS) for their surveys, the Contractor shall comply with the requirements in EPA Office of Land and Emergency Management (OLEM) Procedures for UAS. The approval process may take several weeks. The Contractor shall request approval for UAS use as soon as practicable to allow time for the EPA approval process. The Contractor shall provide EPA the required information for EPA to complete the approval memorandum which includes, but is not limited to, the following:

- Valid remote pilot certificate that meets the requirements in Attachment F,
- Confirmation that the project's HASP covers the use of UAS,
- An access agreement with individual property owners that gives the Contractor approval to use UAS to conduct surveys and aerial photography on their property,
- Contact information for property owners (properties where the mission may occur and the surrounding property owners) to conduct a subset of the required notifications for each UAS mission, and
- Other requirements as set forth in the approval memorandum and referenced in EPA policies.

Please note that future EPA/Federal budgets may not allow the use of UASs for site work of any type. If that is the case, the requested use of UAS would be denied and traditional survey methods would need to be utilized.

Task 10: Deliverables

Draft and final versions of deliverables shall include one (1) electronic copy unless stated otherwise. All other submittals listed in the specifications, on the Submittal Register, or on the drawings shall be made available to the EPA upon request for information only. The EPA approval of all plans is required prior to receiving the Notice to Proceed (NTP) and initiating on-site work. The following submittals are required for this project:

Project Support Plans - All draft final plans shall be submitted within 15 calendar days of contract award, except for the draft PMP which is due with the proposal unless otherwise noted.

- Final Project Management Plan (PMP) – due to the COR within 15 calendar days of receipt of EPA comments on the draft plan. The PMP shall describe how the contractor plans to manage the work. The plan shall include the following items:
    1. The contractor's general approach used to conduct the work in accordance with the PWS, Specifications, and Drawings; and within the Period of Performance.
    2. Identify the volume of material the contractor expects to remediate in monthly intervals.
    3. Identify project organization for this contract.
    4. Identify key personnel and contractor's points of contact and responsibilities.
    5. Identify required resources.
    6. Identify the intended communication process with EPA.
    7. Identify the intended communication process with property owners and local residents and describe how complaints will be addressed.
    8. Identify the intended communication process with other federal, state and local regulatory agencies (for example, US Fish and Wildlife Service [USFWS], Kansas Department of Transportation [KDOT], Kansas Department of Health and Environment [KDHE], etc.).
    9. Identify the contractor's plan for subcontractor management.
    10. Identify the contractor's operations and maintenance (O&M) plan that describes O&M activities for the mine waste consolidation area(s), which shall include when and how the

contractor shall employ stormwater controls, dust suppression measures, and air monitoring.

11. Identify the contractor's schedule (Gantt chart) for completing the work at each location. The schedule shall identify significant milestones, critical sequence of events, and include schedule considerations for each task and subtasks in the PWS. The schedule shall include revegetation efforts, including appropriate seasonal seeding schedules to establish appropriate ground cover. The schedule shall allow sufficient time for all required tasks to be completed prior to contract expiration.
12. If the contractor plans to meet the requirements of the "Commitment to the Local Community" incentive Sub-CLIN identified in the pricing schedule, a plan shall be included in the PMP describing the proposed hiring strategy and how local subcontractor/ services/ laborers will be utilized through the duration of the contract.
13. Joint venture offerors must show the respective areas of responsibility for each partner.

- Final Uniform Federal Policy for Quality Assurance Project Plan (UFP-QAPP), following the Uniform Federal Policy for Quality Assurance Project Plans, Version 1, March 2005, EPA document EPA-505-B-04-900A (https://www.epa.gov/sites/production/files/documents/ufp_qapp_v1_0305.pdf). The final UFP-QAPP shall include the Contractor's approach to provide reproducible data from XRF screening and confirmation sampling. The UFP-QAPP will provide data quality objectives, the field sampling plan (FSP), data management plan (DMP). Additionally, the UFP-QAPP shall include an appendix with the Contractor's FSP and DMP. Due to the TOCOR within 15 calendar days of receipt of EPA comments on the draft plan.

- Final Health and Safety Plan (HASP) - meet requirements of federal, state, and local laws, regulations and other requirements, including OSHA regulations at 29 CFR 1910.120 and any DOT requirements for shipping and/or trucking materials. The Final HASP is due to the COR within 15 calendar days of receipt of EPA comments on the draft plan.

- Final Transportation Management Plan (TMP) – this plan shall detail the Contractor's proposed on-site and off-site haul routes, temporary/permanent improvements to obtain access to the waste areas, corrective actions to repair any damage to public roadways and private property, access controls for entering/exiting public roads from private property including signage and flagging for areas in close proximity to residential properties, measures to keep the haul routes free of dust and debris including trackout, and other measures to maintain public safety during transportation and placement of waste and backfill. This plan describes contractor actions for the purpose of meeting the requirements of this PWS and will be performed in addition to following all local, state, and Federal transportation laws and regulations. The final TMP is due to the COR within 15 calendar days of receipt of EPA comments on the draft plan.

- Final UAS (Unmanned Aerial System or drone) Use Plan – due to the COR within 15 days of EPA comments on draft plan submittal. This plan is required if the Contractor anticipates using UAS to collect field survey data and/or aerial imagery of the site. Plan will consist of the following (it is understood that not all of these items may be available at time of award):
  - UAS type/brand/make/model/manufacturer/date of manufacture, etc.
  - Onboard sensors/capabilities/camera mega pixels/accuracy, etc. (specifications)
  - Pilot's name and contact information.
  - Copy of Pilot's license and any other relevant certifications/trainings.
  - Landowner name and contact information for the work areas that will be flown with the UAS.

- Written documentation of landowner permission to use UAS on or over his/her property.
- List of all adjacent landowners to work areas targeted for UAS usage and their contact information.
- Written explanation of how contractor will comply with third-party survey requirements specified under "Section 01721- Survey Requirements" within the Basis of Design when using UAS to collect site survey data.

- Final Livestock Management Plan (LMP) - Due to the COR within 30 days of final comments on draft LMP. Plan to include the following:
  - A map of the location of active cattle enclosures within project work areas.
  - A map identifying any permanent or temporary fencing that would need to be temporarily moved or removed while performing activities under this contract.
  - A description of the types of any planned temporary fencing and the fencing installation methods.
  - A map and descriptions of the offsite locations where livestock may be transferred while activities under this contract are being performed.
  - Any relevant calculations of acreage required to support relocated livestock or quantity of forage required to make up for any lost grazing space as a result of EPA work and temporary relocation. (For example, if a new temporary location is five acres smaller than original grazing area, then an additional 200 pounds of quality forage per day may be necessary to make up for the loss of grazing area, etc.)
  - Describe how livestock and associated supplies and equipment will be transported to offsite locations. For cost estimating purposes, costs associated with moving livestock, supplies, and equipment will be at the expense of the contractor and should be included in the unit pricing for similar site preparation work in the area.
  - Identify who will be responsible for the care of relocated livestock.
  - Describe how conflict resolution will occur if the landowner/livestock owner is not agreeable to the proposed relocation plan or if livestock is damaged/hurt as a result of Contractor activities. The Contractor is responsible for loss or damage incurred during relocation activities. Any costs of this nature would not be paid from contract funds nor will there be a separate CLIN established to charge for loss/damage. Note: It may be advisable to compensate property owner or lessee for the relocation of livestock and equipment. They generally have experience and a vested interest in their own property. This may also help avoid any misunderstandings and claims of wrongdoing if a livestock owner is compensated for performing a task they are usually well prepared to conduct otherwise.

Site Work Plans

All draft plans to be submitted within 15 calendar days of contract award.

- Final Stormwater Pollution Prevention Plan (SWP3) – due to the COR within 20 calendar days of receipt of EPA comments on the draft plan. The plan shall discuss the Contractor's activities to prevent stormwater contamination, control sedimentation and erosion, and comply with the substantive requirements of the Clean Water Act (CWA). A permit is not required for the work under this PWS but, the substantive requirements of the CWA must be met. The plan shall address Best Management Practices and erosion control efforts, along with their required inspections and maintenance procedures.

- Final Borrow Area Excavation and Restoration Plan – This plan is due to the COR within 20 calendar days of receipt of EPA comments on the draft plan. The plan shall discuss the Contractor's approach to the identification, testing, excavation, and restoration of all borrow areas.

- Final Subsidence Pit, Vent Pipe, and Mineshaft Filling Plan – due to the COR within 20 calendar days of receipt of EPA comments on the draft plan. The plan shall discuss the Contractor's approach to properly fill and cap subsidence pits and fill and plug vent pipes and mineshafts if they are encountered in the repair areas.

- Final Revegetation Plan – due to the COR within 20 calendar days of receipt of EPA comments on the draft plan. The plan shall identify the source and characteristics of imported select fill and topsoil to be used for covering and grading the disturbed areas. The plan shall discuss the Contractor's approach to the identification, testing, excavation, and restoration of all borrow areas. The plan shall provide detailed information about the seed to be used under this contract (temporary and permanent), the borrow source(s) for select clay fill and topsoil, organic content of the proposed topsoil, nutrient content, the procedures used to remove stones greater than 2 inches from the clay fill, procedure used to verify that seed is weed free, and the methods to be implemented during and after revegetation to ensure growth of intended vegetation and management of invasive weeds such as sericea lespedeza (*Lespedeza cuneata*). The plan shall discuss the Contractor's approach to revegetation, including steps to address establishing vegetation during drought and particularly wet conditions if encountered during the contract period. The plan will also identify soil sampling/nutrient testing and plans on when and with what to amend the soil(s), as needed.

Project Reports

- Weekly Progress Report – The weekly progress report is due to the COR by 12:00 p.m. each Tuesday following the NTP. The reports shall be submitted electronically to the COR and included as backup to invoices. The report shall summarize and identify the following items:
    - Work accomplished per each PWS task (acres of clearing and grubbing, cubic yards of excavated waste, cubic yards of backfill and topsoil, grading activities, seed quantities),
    - Problems encountered and resolved,
    - Safety incidents,
    - Media contacts,
    - Citizen complaints,
    - Photographs of work areas,
    - Any other noteworthy issues from the previous work week, and
    - All lengths of roads used that week by Contractor or their subcontractor's haul trucks.

- Haul Route (pre- and post-excavation) Photograph and Video Documentation – This is due to the COR within 10 calendar days prior to the start of excavation and within 10 calendar days following the completion of the use of the haul route. The Contractor shall submit one electronic copy of the native photograph (JPG or other common format) and video file format (MOV, AVI, WMV or another common format). All off-site haul routes shall be photographed and videotaped prior to construction and after the work in a given area has been completed, in order to assess any damage that may have occurred due to construction activities. The Contractor must submit the photos and video to the EPA both prior to construction and, following construction completion. The speed of the vehicle from which the video is taped shall be no more than 20 miles per hour.

- Project photographs and video (in electronic file format) of work areas – This is due to the COR at

least 15 calendar days prior to the start of construction at a given area and within 15 calendar days after completion of final construction at a given area. Digital photographs/video shall be provided for all work areas before beginning work, during construction, and after the work has been completed. Such photographs/video shall, at a minimum, cover each area in all four directions at the same locations. For each photograph/video, the date, time, location (with GPS coordinates), and viewing direction shall be recorded. At a minimum, the digital camera used shall be auto focusing with a minimum image resolution of 12 megapixels and equipped with a flash for low light conditions. The camera shall also have a minimum two times zoom capacity and be capable of transferring digital photographs to a "JPEG" or "TIF" electronic format.

- Original third-party surveyor field notes for each of the areas – due to the COR within 15 calendar days of completion of final construction of each area.

- Final As-Built Drawings – These are due to the COR within 30 calendar days of completion of a third-party survey for final construction of an area or as requested by the COR as final quantity payments shall be based on the numbers reported in the survey(s). The Contractor shall submit one electronic copy of each format (AutoCAD format, PDF, and ESRI shapefile format) of the final drawings to the EPA.

- Draft Annual Remedial Action Report(s) – This is due to the COR within 30 calendar days after each contract period. The sections in this report shall match the sections that cover each of the tasks in the PWS. This report shall include, but is not limited to the following items:

    - Documentation on the completion of the required PWS tasks with any field changes,
    - Total volume of mine waste and contaminated soil excavated and disposed,
    - Location of disposal,
    - Acres of land remediated,
    - Acres repaired and restored,
    - Actual volumes of materials used, to include:
        - backfill,
        - topsoil,
        - seed,
        - fencing, and
        - other construction materials.

This information shall be provided in summary table format as part of the Annual Remedial Action Report.

In addition, the Annual Remedial Action Report shall include appendices for the following items:

- Property access and documentation of pre-construction site walks (See Task 1),
- Digital imagery documenting repair areas and public roadways (See Task 10),
- Final surveys (See Task 10), and
- Analytical Results.

Assumes the completion of an Annual Remedial Action Report following completion of activities in each period and the last Annual Remedial Action Report following completion of activities in the last option period but 30 days prior to contract expiration.

- Final Annual Remedial Action Report(s) – This is due to the COR within 15 calendar days of receipt of EPA comments on the draft Annual Remedial Action Report(s).

- Decommissioning and Abandonment Records of mine shafts and vent pipes – due to the COR within 15 calendar days of completing the abandonment of structures.

V. TABLE OF DELIVERABLES

(submitted electronically unless otherwise noted)

Project Support Plans	
Document	**Due Date**
Draft PMP	Due with Proposal
Draft HASP, TMP, UAS Use Plan, LMP	Due 15 calendar days from contract award
Draft QAPP	Due 30 calendar days from contract award
Final PMP, QAPP, HASP, TMP, DUP, LMP	Due 15 calendar days from receipt of EPA comments on the draft plan.
Site Work Plans	
Draft Stormwater Pollution Prevention Plan; Draft Borrow Area Excavation and Restoration Plan; Subsidence Pit, Vent Pipe, and Mineshaft Filling Plan; Revegetation Plan	Due 15 calendar days from contract award
Final Stormwater Pollution Prevention Plan; Final Borrow Area Excavation and Restoration Plan; Subsidence Pit, Vent Pipe, and Mineshaft Filling Plan; Revegetation Plan	Due 20 calendar days from receipt of EPA comments on the draft plan.
Project Reports	
Signed access forms	Due 3 calendar days from receipt of signed form.
Documentation of pre-construction site walks	Due 5 calendar days from completion of site walk.
Weekly Progress Reports	Due by 12:00 p.m. each Monday following NTP and with submission of Invoices
Haul Route (pre-excavation video)	Due 10 calendar days prior to start of excavation.
Haul Route (post-excavation video)	Due 10 calendar days following the completion of the use of the haul route for all activities.
Project photographs and video (pre-construction)	Due 15 calendar days prior to start of construction at each area.
Project photographs and video (post-construction)	Due 15 calendar days following completion of final revegetation at each area.
Final As-Built Drawings	Due 30 calendar days after completion of a third-party survey following final regrading of the work area. Due 15 calendar days prior to submittal of the final invoice.
Draft Annual Remedial Action Report(s)	Due 30 calendar days after each contract period.

Final Annual Remedial Action Report(s)	Due 15 calendar days from receipt of EPA comments on the draft plan.
Last Draft Annual Remedial Action Report	Due 30 calendar days prior to contract expiration.
Original third-party surveys for activities defined in Task 9 in each phase.	Due 15 calendar days after each sub-activity under the task.
Decommissioning and Abandonment Records	Due 15 calendar days of completing the abandonment of each mineshaft, vent pipe, or well.

VI. ON-SITE PERSONNEL

All onsite personnel during mine waste removal shall have completed 40-hour OSHA HAZWOPER training. All on-site personnel throughout the contract shall have completed 24-hour OSHA HAZWOPER training and be up to date on HAZWOPER 8-hour annual refreshers before reporting for work on site. Training certificates/documentation and all other required documents for all on-site personnel shall be maintained on-site for the EPA to review at any time. This includes on-road truck drivers operating equipment without engineering controls such as maintained cabin air filters and keeping windows rolled up. It is the responsibility of the employer to assess employee exposure to heavy metals on site and implement protective measures as needed. Site safety is the responsibility of everyone, but contractors are required to comply with all OSHA regulations and this compliance is the responsibility of the employer.

VII. PERFORMANCE STANDARDS

All work performed shall be performed in accordance with the BOD specifications, PWS, RD drawings, the QAPP and all other applicable contract documents. The period of performance for this contract will consist of one 12-month base period and two 12-month option periods that will be initiated from the date of the contract award.

VIII. PERSONNEL BACKGROUND CHECKS FOR CONTRACTOR EMPLOYEES

The contractor shall provide qualified personnel that meet the background check requirement identified below. The EPA has established 2 levels of criteria. Level 1contains background check criteria applicable to all contractor employees working at a response site. Level 2 contains background check criteria requirement that apply to all contract employees working at sites that are designated by EPA as "Sensitive Sites." Examples of sensitive sites include those that involve law enforcement activities, apparent or suspected terrorist activities, any indoor cleanups (including private residences), drug lab cleanups, and response actions at geographically sensitive locations such as military installations and government buildings. The Task Order Contracting Officer will notify the contractor whenever EPA designates a response site as a sensitive site. The designation will be provided to the contractor in the task order, work assignment, or verbally, as the situation warrants. If the designation is provided verbally, the Contracting Officer will issue a written designation as soon as practicable after the verbal notification.

LEVEL 1- EPA Background Check Criteria:

- Can be a non--U.S. citizen with a valid visa,
- No convictions for crimes involving issues of National Security. A "national security crime" is

defined as any criminal activity involving espionage or foreign aggression against the United States, intelligence or counterintelligence activities, concerned with undermining or overthrowing the government of the United States and unlawful handling or disclosure of classified information.

- No weapons offense in the last five (5) years,
- No felony conviction in the last three (3) years,
- Not a fugitive from justice,
- Not listed in the Excluded Parties Listing System (EPLS). EPLS is a web-based database that identifies parties excluded throughout the U.S. Government from receiving federal contracts or subcontracts. The EPLS is available at: http://epls.gov.

If the results of an employee's background check do not meet the criteria in either level l, as required, the Contractor may apply for a waiver. To initiate the waiver process, the contractor shall submit, in writing, the background report on the employee and an explanation of the need for the employee. The Director of the Superfund/RCRA Regional Procurement Operations Division must approve the waiver before the employee performs contract services for EPA. The contracting officer will notify the contractor of the Agency decision within five (5) days of receipt of the contractor's request for a waiver.

The contractor shall submit its request to the Director, Superfund/RCRA Regional Procurement Operations Division at:

By Mail:
U.S. Environmental Protection Agency Director, SRRPOD
Mail Code 3805R
1200 Pennsylvania Avenue, NW
Washington, DC 20460

By Courier/Hand Carried:
U.S. Environmental Protection Agency Director, SRRPOD
Bid and Proposal Room
Ronald Reagan Building, 6th floor, Room 61107
1300 Pennsylvania Avenue, NW
Washington, DC 20004

VIV. EPA CONTACTS

Contracting Officer Representative (COR):	Todd Campbell (913) 551-7115
Alternate COR:	Elizabeth Hagenmaier (913) 551-7939
Contracting Officer:	Scott Dandy (913) 551-7949
Contracting Specialist:	Leah Thurman (913) 551-7662

PWS Attachments:

These documents will made available electronically.

Attachment A – Work Area Map
Attachment B – BOD/Specifications
Attachment C – Design Drawings
Attachment D – Quality Assurance Surveillance Plan
Attachment E - EPA R7 SOP 2341.1
Attachment F – EPA OLEM Procedures for UAS

General Schedule
for
Cherokee County Operable Unit 08,
Railroads
Phase I Remedial Action

The schedule for this fourth phase of remedial action work begins at day 1 of award and proceeds through contract completion and site turn over to KDHE. (Note: Not a deadline, but a goal)

Day 1	Award (estimated to be end of August 2022)
Days 1 through 60	Review and approval of contractor submittals. Notice to proceed.
Days 60 through 90	Mobilization
Days 90 through 610	Site remediations and hauling
Days 610 through 700	Construction of repository and capping
Days 700 through 730	Site completion work, final report writing and closeouts.
Days 730 through 1,095	Inspections and continue warranty for vegetation period
Day XXX	Inspections and turnover of site O&M to KDHE.

APPENDIX II

DEFINITIONS

APPENDIX II

Definitions
for
Cherokee County Operable Unit 8, Railroads
Phase I

For purposes of this Contract, the term:

a. "Access" shall include but is not limited to right(s)-of-way, easement(s), and all other forms of legal ingress to private or public property that are necessary to satisfactorily complete the response actions conducted pursuant to this SSC.
b. "Assure" shall mean that the KDHE agrees to seek appropriations for payment.
c. "Change Order" shall mean a written order issued by a recipient or its designated agent to its contractor authorizing an addition to, deletion from or revision of a contract, usually initiated at the contractor's request.
d. "Construction Completion" shall mean when all physical construction activities have been completed as outline in the Remedial Action, including Final Stabilization.
e. "Day" shall mean a calendar day. In computing any period of time under this SSC, where the last day would fall on a Saturday, Sunday or federal holiday, the period of time shall run until the end of the next business day.
f. "EPA" shall mean the United States Environmental Protection Agency.
g. "EPA personnel" shall be deemed to include EPA employees, contractors and authorized representatives, unless otherwise specified.
h. "Final Stabilization" means all soil-disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of 75 percent of the cover with established root zones which is typical for undisturbed areas, unpaved areas or areas not covered by permanent structures in the geographic location of the construction site has been established or equivalent stabilization measures (such as the use of riprap, gabions or geotextiles) have been employed.
i. "Fund" shall mean the Hazardous Substance Superfund established by section 9507 of the Internal Revenue Code of 1986.
j. "KDHE" shall mean the Kansas Department of Health and Environment.
k. "KDHE personnel" shall be deemed to include KDHE employees, contractors and authorized representatives, unless otherwise specified.
l. "NCP" shall mean the National Contingency Plan as set forth in 40 CFR part 300, 55 Federal Register 8666 *et seq.* (1990), as amended.
m. "Operable Unit #08" or "OU8" shall refer to the Railroads operable unit of the Cherokee County Superfund site.
n. "Operational and Functional" (O&F), if necessary, shall mean the determination made mutually and concurrently by the EPA and KDHE, after construction completion for Phase I, that the Component is functioning properly and is operating as designed.
o. "Operational and Functional Period" (O&F Period) is generally defined as the time period between construction completion of the Remedy and the time when the Remedy is operating as designed. The O&F Period is also commonly referred to as the "remedy shakedown" period. The O&F Period for Phase I of the Remedial Action is only necessary if contamination is left behind or capped due to mutual agreement

between EPA and KDHE. This may be due to several reasons including, but not limited to, drainage issues, property owner denial of access, obstructions, utilities, etc. If necessary, the O&F Period at Railroads OU 08 begins upon satisfactory resolution of any punch-list items that were identified during the joint inspection of the constructed remedy by the EPA and the State. Within one year of this date, inspections will be conducted in accordance with Articles XXIII of this SSC to determine that Phase I is O&F. The O&F Period concludes one year after Construction Completion, to which the EPA may grant an extension, or when the remedy is determined concurrently by the EPA and the State to be functioning properly and is performing as designed, whichever is earlier.

p. "Operation and Maintenance Period" (O&M Period) shall refer to the activities necessary to maintain the effectiveness of the Remedy and shall begin at the conclusion of the O&F Period, if necessary, for the Phase I Component of the Remedy and shall continue until the objectives of the ROD are met.
q. "Remedy" or "Remedial Action" or "RA" shall mean the actions specified in the ROD for OU 08, which was signed in September 2016.
r. "RPM" shall mean the EPA Remedial Project Manager.
s. "Site" shall mean the Cherokee County Superfund site, located in Cherokee County, Kansas.
t. "SPM" shall mean the State Project Manager.
u. "Special Account" or "Special Account Funds" shall mean allocation of settlement funds designated for use by EPA Region 7 for the RA at the Site.
v. "State" shall mean the state of Kansas.
w. "UAS" shall mean unmanned aerial systems.

APPENDIX III

EPA REMEDIAL DESIGN COST ESTIMATE

Total Project Cost Table
Revised Final Design Letter Report for Remedial Design of Operable Unit 8 Railroads
Cherokee County, Kansas

Work Element 01 - General Requirements

Item	Description	Estimated Quantity	Unit of Measure	Unit Cost	Contract Cost	Contingency[1] 10%	Escalation[2] 1.35%	Project Cost[3]	Notes
01 - Mobilization and Demobilization					**$75,970**	**$7,597**	**$1,128**	**$84,695**	
01	Mobilization	1	LS	$25,000	$25,000	$2,500	$371	$27,871	Includes office trailer delivery and utility connections
02	Site Trailer	18	MO	$1,165	$20,970	$2,097	$311	$23,378	Trailer, furniture, internet/phone, electric, sanitary
03	Traffic Control	1	LS	$5,000	$5,000	$500	$74	$5,574	
04	Demobilization	1	LS	$20,000	$20,000	$2,000	$297	$22,297	
05	Site Cleanup	1	LS	$5,000	$5,000	$500	$74	$5,574	
02 - Submittals					**$65,000**	**$6,500**	**$965**	**$72,465**	
	Preconstruction Plans & Submittals	1	LS	$65,000	$65,000	$6,500	$965	$72,465	
				Total:	**$140,970**	**$14,097**	**$2,093**	**$157,160**	

Notes:

1. The contingency of 10% reflects the unknown costs associated with constructing a given project, such as adverse weather conditions, materials costs, or unfavorable market conditions.
2. The escalation of 1.35% reflects cost increases from the date of estimate preparation to assumed midpoint of construction.
3. The Project Cost includes an Escalation of 1.35% and a Contingency of 10%.

Total Project Cost Table
Revised Final Design Letter Report for Remedial Design of Operable Unit 8 Railroads
Cherokee County, Kansas

SEGMENT E

Item	Description	Estimated Quantity	Unit of Measure	Unit Cost	Contract Cost	Contingency[1] 10%	Escalation[2] 1.35%	Project Cost[3]	Notes
01 - Initial Activities					**$13,459**	**$1,346**	**$200**	**$15,004**	
01	Temporary Access/Haul Road Improvements	1.0	LS	$4,500	$4,543	$454	$67	$5,064	1 entrance per 2 miles of work segment length
02	XRF Grid Survey	426	EA	$20.91	$8,916	$892	$132	$9,940	2 field techs/XRF rental/supplies at 6 samples/hr
02 - Site Preparation					**$28,049**	**$2,805**	**$417**	**$31,270**	
03	Construction Survey and Staking	1.0	DY	$1,353	$1,365	$137	$20	$1,522	1 field day per 2 miles of work segment length
	Temporary Erosion and Sediment Control - Pre-Construction								
04	Silt Fence	4,264	LF	$2.06	$8,786	$879	$130	$9,795	RSM 31 25 14.16.1000; assume 20% of segment length; both sides of railbed
05	Straw Bales/Wattles	853	LF	$2.55	$2,175	$218	$32	$2,425	RSM 31 25 14.16.1250; assume 20% of silt fence length
06	Inspection and Maintenance	1.0	LS	$2,500	$2,500	$250	$37	$2,787	Assume same number as Access/Haul Roads
08	Clearing and Grubbing - Light	2.4	AC	$3,151	$7,712	$771	$115	$8,597	RSM 31 11 10.10.002; assume 20% of disturbed area
09	Clearing and Grubbing - Medium	1.2	AC	$4,504	$5,511	$551	$82	$6,144	RSM 31 11 10.10.0200; assume 10% of disturbed area
03 - Earthwork					**$1,025,049**	**$102,505**	**$15,222**	**$1,142,775**	
	Mine/Railroad Embankment Waste and Contaminated Soil								
09	Excavation and Loading	51,462	BCY	$4.54	$233,691	$23,369	$3,470	$260,531	RSM 31 23 16.42.025 Medium (1.5CY) Excavator; add 100% for loading
09	Shape Subgrade (Select Fill) w/ Medium Dozer	10,292	BCY	$2.23	$22,932	$2,293	$341	$25,566	RSM 31 23 23.2300 Med Dozer
10	Dust Control/Water Truck	1	LS	$15,000	$15,000	$1,500	$223	$16,723	
10	Hauling (18 CY truck)	51,462	BCY	$12.27	$631,321	$63,132	$9,375	$703,828	RSM 31 23 23.20.9100; avg 45 mph for 30 mile cycle; +25% for restricted access
11	Placement and Rough Grading at Repository (Location TBD)	51,462	BCY	$2.27	$116,846	$11,685	$1,735	$130,265	Assume half the unit rate of Excavation and Loading
12	Confirmation Sampling	81	EA	$31.37	$2,528	$253	$38	$2,818	XRF Grid Survey rate +50% for lab confirmation samples
13	Post Excavation Survey	2.0	DY	$1,353	$2,731	$273	$41	$3,044	Construction Staking LOE x2 to cover topo survey
04 - Restoration					**$317,616**	**$31,762**	**$4,717**	**$354,094**	
	Import and Place Fill from Off-Site Borrow Sources								
13	Select Fill	10,292	ECY	$5.00	$51,462	$5,146	$764	$57,372	Assumed price to purchase/load
14	Top Soil	2,468	ECY	$25.00	$61,690	$6,169	$916	$68,775	Assumed price (delivered to site)
10	Hauling (18 CY truck)	10,292	BCY	$12.27	$126,264	$12,626	$1,875	$140,766	RSM 31 23 23.20.9100; avg 45 mph for 30 mile cycle; +25% for restricted access
13	Soil Testing - Geotech for Fill	4	EA	$225	$926	$93	$13.76	$1,033	RSM 01 45 23.50; incl. grain size, moisture, compaction, and Atterberg Limits (1/2,500 CY)
13	Soil Testing - Fertility for Topsoil	2	EA	$75	$123	$12	$1.83	$138	Assumed typical rate for fertility (topsoil) sampling; 1 per 1,500 CY; Kstate Dept of Ag
15	Finish Grading	12.2	AC	$1,800	$22,025	$2,202	$327	$24,554	Small tractor + roll/drag to prep for seeding
	Seed/Fertilizer/Mulch								
	Temporary Seed - Annual Blend	6.1	AC	$679	$4,156	$416	$62	$4,633	Assume 1/2 of disturbed area at 1/3 unit rate of permanent seeding
16	Permanent Seed - Pasture/Native Grasses	12.2	AC	$2,040	$24,961	$2,496	$371	$27,828	From recent Cherokee Cnty TO47 RA projects
	Fertilizer	12.2	AC	$480	$5,873	$587	$87	$6,548	120 lbs/acre @$1/lb x4 for application
	Straw Mulch, Crimped	12.2	AC	$500	$6,118	$612	$91	$6,821	1,000 lbs(1 round bale)/acre @$125 delivered x4 for blowing/crimping
17	Remove/Restore Temporary Access/Haul Road	1.0	LS	$3,000	$3,028	$303	$45	$3,376	
	Erosion and Sediment Control - Post-Construction								
18	Replace Drainage Culvert		EA	$2,640	$0	$0	$0	$0	$660 for 18"x30' pipe x4 for delivery/installation
18	Replace Fences/Gates		LS	$1,000	$0	$0	$0	$0	Assumed nominal amount for replacement
18	Silt Fence	2,132	LF	$2.06	$4,393	$439	$65	$4,897	Assume half the original fence length requires repair/replace
19	Inspection and Maintenance	1.0	EA	$2,500	$2,500	$250	$37	$2,787	Assume same number as Access/Haul Roads
20	As-Built Survey and Drawings	3.0	DY	$1,353	$4,096	$410	$61	$4,566	Construction Staking LOE x3 to cover as-built drawings
				Total:	**$1,384,172**	**$138,417**	**$20,555**	**$1,543,144**	

Overall Cost ($/BCY):	$29.99

Notes:

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3. The Project Cost includes an Escalation of 1.35% and a Contingency of 10%.
4. Waste haul route length is from the approximate center of each segment to the Sunflower Pit waste consolidation area.
5. For estimating purposes the backfill/topsoil haul route length was assumed to be half the length of the waste haul route and that the Contractor will utilize multiple borrow sites.

Total Project Cost Table
Revised Final Design Letter Report for Remedial Design of Operable Unit 8 Railroads
Cherokee County, Kansas

SEGMENT F

Item	Description	Estimated Quantity	Unit of Measure	Unit Cost	Contract Cost	Contingency[1] 10%	Escalation[2] 1.35%	Project Cost[3]	Notes
01 - Initial Activities					$5,050	$505	$75	$5,630	
01	Temporary Access/Haul Road Improvements	0.4	LS	$4,500	$1,705	$170	$25	$1,900	1 entrance per 2 miles of work segment length
02	XRF Grid Survey	160	EA	$20.91	$3,346	$335	$50	$3,730	2 field techs/XRF rental/supplies at 6 samples/hr
02 - Site Preparation					$9,587	$959	$142	$10,688	
03	Construction Survey and Staking	0.4	DY	$1,353	$512	$51	$8	$571	1 field day per 2 miles of work segment length
	Temporary Erosion and Sediment Control - Pre-Construction								
04	Silt Fence	1,600	LF	$2.06	$3,297	$330	$49	$3,675	RSM 31 25 14.16.1000; assume 20% of segment length; both sides of railbed
05	Straw Bales/Wattles	320	LF	$2.55	$816	$82	$12	$910	RSM 31 25 14.16.1250; assume 20% of silt fence length
06	Inspection and Maintenance	0.0	LS	$2,500	$0	$0	$0	$0	Assume same number as Access/Haul Roads
08	Clearing and Grubbing - Light	0.9	AC	$3,151	$2,894	$289	$43	$3,226	RSM 31 11 10.10.002; assume 20% of disturbed area
09	Clearing and Grubbing - Medium	0.5	AC	$4,504	$2,068	$207	$31	$2,305	RSM 31 11 10.10.0200; assume 10% of disturbed area
03 - Earthwork					$131,218	$13,122	$1,949	$146,288	
	Mine/Railroad Embankment Waste and Contaminated Soil								
09	Excavation and Loading	6,027	BCY	$4.54	$27,368	$2,737	$406	$30,512	RSM 31 23 16.42.025 Medium (1.5CY) Excavator; add 100% for loading
09	Shape Subgrade (Select Fill) w/ Medium Dozer	1,205	BCY	$2.23	$2,686	$269	$40	$2,994	RSM 31 23 23.2300 Med Dozer
10	Dust Control/Water Truck	0.5	LS	$15,000	$7,500	$750	$111	$8,361	
10	Hauling (18 CY truck)	6,027	BCY	$12.27	$73,936	$7,394	$1,098	$82,428	RSM 31 23 23.20.9100; avg 45 mph for 30 mile cycle; +25% for restricted access
11	Placement and Rough Grading at Repository (Location TBD)	6,027	BCY	$2.27	$13,684	$1,368	$203	$15,256	Assume half the unit rate of Excavation and Loading
12	Confirmation Sampling	160	EA	$31.37	$5,018	$502	$75	$5,595	XRF Grid Survey unit rate +50% for lab confirmation samples
13	Post Excavation Survey	0.8	DY	$1,353	$1,025	$102	$15	$1,142	Construction Staking LOE x2 to cover topo survey
04 - Restoration					$72,129	$7,213	$1,071	$80,413	
	Import and Place Fill from Off-Site Borrow Sources								
13	Select Fill	1,205	ECY	$5.00	$6,027	$603	$89	$6,719	Assumed price to purchase/load
14	Top Soil	926	ECY	$25.00	$23,148	$2,315	$344	$25,807	Assumed price (delivered to site)
10	Hauling (18 CY truck)	1,205	BCY	$12.27	$14,787	$1,479	$220	$16,486	RSM 31 23 23.20.9100; avg 45 mph for 30 mile cycle; +25% for restricted access
13	Soil Testing - Geotech for Fill	0	EA	$225	$108	$11	$1.61	$121	RSM 01 45 23.50; incl. grain size, moisture, compaction, and Atterberg Limits (1/2,500 CY)
13	Soil Testing - Fertility for Topsoil	1	EA	$75	$46	$5	$0.69	$52	Assumed typical rate for fertility (topsoil) sampling; 1 per 1,500 CY; Kstate Dept of Ag
15	Finish Grading	4.6	AC	$1,800	$8,264	$826	$123	$9,214	Small tractor + roll/drag to prep for seeding
	Seed/Fertilizer/Mulch								
	Temporary Seed - Annual Blend	2.3	AC	$679	$1,560	$156	$23	$1,739	Assume 1/2 of disturbed area at 1/3 unit rate of permanent seeding
16	Permanent Seed - Pasture/Native Grasses	4.6	AC	$2,040	$9,366	$937	$139	$10,442	From recent Cherokee Cnty TO47 RA projects
	Fertilizer	4.6	AC	$480	$2,204	$220	$33	$2,457	120 lbs/acre @$1/lb x4 for application
	Straw Mulch, Crimped	4.6	AC	$500	$2,296	$230	$34	$2,559	1,000 lbs(1 round bale)/acre @$125 delivered x4 for blowing/crimping
17	Remove/Restore Temporary Access/Haul Road	0.4	LS	$3,000	$1,136	$114	$17	$1,267	
	Erosion and Sediment Control - Post-Construction								
18	Replace Drainage Culvert		EA	$2,640	$0	$0	$0	$0	$660 for 18"x30' pipe x4 for delivery/installation
18	Replace Fences/Gates		LS	$1,000	$0	$0	$0	$0	Assumed nominal amount for replacement
18	Silt Fence	800	LF	$2.06	$1,648	$165	$24	$1,838	Assume half the original fence length requires repair/replace
19	Inspection and Maintenance	0.0	EA	$2,500	$0	$0	$0	$0	Assume same number as Access/Haul Roads
20	As-Built Survey and Drawings	1.1	DY	$1,353	$1,537	$154	$23	$1,713	Construction Staking LOE x3 to cover as-built drawings
				Total:	$217,983	$21,798	$3,237	$243,018	

Overall Cost ($/BCY):	$40.32

Notes:

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2. The escalation of 1.35% reflects cost increases from the date of estimate preparation to assumed midpoint of construction.
3. The Project Cost includes an Escalation of 1.35% and a Contingency of 10%.
4. Waste haul route length is from the approximate center of each segment to the Sunflower Pit waste consolidation area.
5. For estimating purposes the backfill/topsoil haul route length was assumed to be half the length of the waste haul route and that the Contractor will utilize multiple borrow sites.

Total Project Cost Table
Revised Final Design Letter Report for Remedial Design of Operable Unit 8 Railroads
Cherokee County, Kansas

SEGMENT C

Item	Description	Estimated Quantity	Unit of Measure	Unit Cost	Contract Cost	Contingency[1] 10%	Escalation[2] 1.35%	Project Cost[3]	Notes
01 - Initial Activities					$35,099	$3,510	$521	$39,130	
01	Temporary Access/Haul Road Improvements	2.6	LS	$4,500	$11,847	$1,185	$176	$13,207	1 entrance per 2 miles of work segment length
02	XRF Grid Survey	1,112	EA	$20.91	$23,252	$2,325	$345	$25,922	2 field techs/XRF rental/supplies at 6 samples/hr
02 - Site Preparation					$74,126	$7,413	$1,101	$82,640	
03	Construction Survey and Staking	2.6	DY	$1,353	$3,561	$356	$53	$3,970	1 field day per 2 miles of work segment length
	Temporary Erosion and Sediment Control - Pre-Construction								
04	Silt Fence	11,120	LF	$2.06	$22,912	$2,291	$340	$25,543	RSM 31 25 14.16.1000; assume 20% of segment length; both sides of railbed
05	Straw Bales/Wattles	2,224	LF	$2.55	$5,671	$567	$84	$6,323	RSM 31 25 14.16.1250; assume 20% of silt fence length
06	Inspection and Maintenance	3.0	LS	$2,500	$7,500	$750	$111	$8,361	Assume same number as Access/Haul Roads
08	Clearing and Grubbing - Light	6.4	AC	$3,151	$20,111	$2,011	$299	$22,420	RSM 31 11 10.10.002; assume 20% of disturbed area
09	Clearing and Grubbing - Medium	3.2	AC	$4,504	$14,372	$1,437	$213	$16,023	RSM 31 11 10.10.0200; assume 10% of disturbed area
03 - Earthwork					$2,495,460	$249,546	$37,058	$2,782,063	
	Mine/Railroad Embankment Waste and Contaminated Soil								
09	Excavation and Loading	123,352	BCY	$4.54	$560,153	$56,015	$8,318	$624,486	RSM 31 23 16.42.025 Medium (1.5CY) Excavator; add 100% for loading
09	Shape Subgrade (Select Fill) w/ Medium Dozer	24,670	BCY	$2.23	$54,968	$5,497	$816	$61,281	RSM 31 23 23.2300 Med Dozer
10	Dust Control/Water Truck	3	LS	$15,000	$45,000	$4,500	$668	$50,168	
10	Hauling (18 CY truck)	123,352	BCY	$12.27	$1,513,263	$151,326	$22,472	$1,687,061	RSM 31 23 23.20.9100; avg 45 mph for 30 mile cycle; +25% for restricted access
11	Placement and Rough Grading at Repository (Location TBD)	123,352	BCY	$2.27	$280,076	$28,008	$4,159	$312,243	Assume half the unit rate of Excavation and Loading
12	Confirmation Sampling	1,112	EA	$31.37	$34,878	$3,488	$518	$38,884	XRF Grid Survey unit rate +50% for lab confirmation samples
13	Post Excavation Survey	5.3	DY	$1,353	$7,121	$712	$106	$7,939	Construction Staking LOE x2 to cover topo survey
04 - Restoration					$791,607	$79,161	$11,755	$882,523	
	Import and Place Fill from Off-Site Borrow Sources								
13	Select Fill	24,670	ECY	$5.00	$123,352	$12,335	$1,832	$137,519	Assumed price to purchase/load
14	Top Soil	6,435	ECY	$25.00	$160,880	$16,088	$2,389	$179,357	Assumed price (delivered to site)
10	Hauling (18 CY truck)	24,670	BCY	$12.27	$302,653	$30,265	$4,494	$337,412	RSM 31 23 23.20.9100; avg 45 mph for 30 mile cycle; +25% for restricted access
13	Soil Testing - Geotech for Fill	10	EA	$225	$2,220	$222	$32.97	$2,475	RSM 01 45 23.50; incl. grain size, moisture, compaction, and Atterberg Limits (1/2,500 CY)
13	Soil Testing - Fertility for Topsoil	4	EA	$75	$322	$32	$4.78	$359	Assumed typical rate for fertility (topsoil) sampling; 1 per 1,500 CY; Kstate Dept of Ag
15	Finish Grading	31.9	AC	$1,800	$57,438	$5,744	$853	$64,035	Small tractor + roll/drag to prep for seeding
	Seed/Fertilizer/Mulch								
	Temporary Seed - Annual Blend	16.0	AC	$679	$10,839	$1,084	$161	$12,083	Assume 1/2 of disturbed area at 1/3 unit rate of permanent seeding
16	Permanent Seed - Pasture/Native Grasses	31.9	AC	$2,040	$65,096	$6,510	$967	$72,573	From recent Cherokee Cnty TO47 RA projects
	Fertilizer	31.9	AC	$480	$15,317	$1,532	$227	$17,076	120 lbs/acre @$1/lb x4 for application
	Straw Mulch, Crimped	31.9	AC	$500	$15,955	$1,596	$237	$17,787	1,000 lbs(1 round bale)/acre @$125 delivered x4 for blowing/crimping
17	Remove/Restore Temporary Access/Haul Road	2.6	LS	$3,000	$7,898	$790	$117	$8,805	
	Erosion and Sediment Control - Post-Construction								
18	Replace Drainage Culvert		EA	$2,640	$0	$0	$0	$0	$660 for 18"x30' pipe x4 for delivery/installation
18	Replace Fences/Gates		LS	$1,000	$0	$0	$0	$0	Assumed nominal amount for replacement
18	Silt Fence	5,560	LF	$2.06	$11,456	$1,146	$170	$12,772	Assume half the original fence length requires repair/replace
19	Inspection and Maintenance	3.0	EA	$2,500	$7,500	$750	$111	$8,361	Assume same number as Access/Haul Roads
20	As-Built Survey and Drawings	7.9	DY	$1,353	$10,682	$1,068	$159	$11,909	Construction Staking LOE x3 to cover as-built drawings
				Total:	$3,396,291	$339,629	$50,435	$3,786,355	

Overall Cost ($/BCY):	$30.70

Notes:

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5. For estimating purposes the backfill/topsoil haul route length was assumed to be half the length of the waste haul route and that the Contractor will utilize multiple borrow sites.

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KDHE LEGAL OFFICE

CONCURRENCE SHEET

BUREAU OF ENVIRONMENTAL REMEDIATION

TODAY'S DATE: August 5, 2022

This concurrence form is for your review and comments on the attached document;

DOCUMENT TYPE: Superfund State Contract **PROJECT NUMBER:** C3-011-73152

IN THE MATTER OF: Superfund State Contract for Phase I of remedial activities at Operable Unit 08, Cherokee County Superfund Site, Kansas to address mine waste and soils contaminated with heavy metals located within the former railroad embankments across the entire Site.

	Name	Date	Comments
Project Manager – Peyton Witham	Peyton Witham	08/05/2022	
Unit Manager – vacant			
Section Chief – Joseph Dom		8/5/22	
Bureau Director – Randy Carlson		8/5/22	
Legal Office – Kate Gleeson	K. Gleeson	8/9/22	via email kls
Director of Environment – Leo G. Henning		8-11-22	
Legal – General Counsel Brian Vazquez		8/9/22	
Secretary – Janet Stanek	Janet Stanek	8-11-22	

PLEASE RETURN ORIGINAL TO PEYTON WITHAM AFTER SIGNED BY SECRETARY

Legal: Please return original to Peyton Witham, BER, Suite 410

Received

AUG 09 2022

DIRECTOR OF ENVIRONMENT
DEPT. OF HEALTH & ENVIRONMENT